

W525rZgJ

WESTERN RESERVE UNIVERSITY

THE GRADUATE SCHOOL NEWS

CLEVELAND, OHIO

Series 6

SEPTEMBER 1, 1938

Number 1

THE PLACE OF A GRADUATE SCHOOL IN A GREAT CITY

The community which we call Greater Cleveland seems to have accepted the belief that education is a continuous process, beginning in early childhood and continuing far into adult life, terminating only when the individual ceases to be hungry for additional knowledge or skill. A survey of educational opportunity in this

area reveals the existence of nursery schools, kindergartens, elementary, junior and senior high schools, colleges and universities, and numerous institutions providing special types of occupational training. Some are supported by public taxation, and some in whole or part by church funds, tuition, endowments, and contribu-

tions by an increasing number of public-spirited citizens.

Diverse and separate as these individual units may at first appear, there runs through them a thread of unity, a common purpose—that of providing for each individual the training which will contribute most effectively to the richness and fullness of his living.

Many of us were not born or educated in Cleveland, but have lived here for some time. Here we have established our homes and our occupations. Here our children are growing up or have themselves become adults. We have formed new friendships and local interests, and in a large measure have transferred our earlier loyalties to Cleveland. It has become our city, and its schools, colleges and universities are becoming our own to an increasing extent with the passing of the years. It is our hope that our children and grandchildren will be better because of the unusual educational opportunities which our local community affords.

At the top of this educational pyramid is the Graduate School of Arts and Sciences, leading through courses of intensive research and scholastic achievements to the highest academic degrees. By an increased interest and support from the citizenry of greater Cleveland it can be expanded, diversified and developed, until in scope and quality of work it may become the equal of the best graduate schools of America.

To participate in an educational adventure of such caliber should be regarded as an obligation, a pleasure and an investment by all civic-minded, forward-looking citizens.

(From the address of Perley M. Watson, President of the Alumni, Graduate School, February 1938.)

NEWS FROM THE ALUMNI

The Graduate School Alumni officers for 1938-39 are:

President—Harold A. Blaine.

First Vice-President—Allen Y. King.

Second Vice-President—John Cramer.

Treasurer—J. Richard Smeltz.

Secretary—Margaret Hodgman.

Marian Altman, A. M., 1936, has an article in *Classical Philology*, April 1938, XXXIII, 198, on "The Ruler Cult in Seneca."

Lois W. Brock, A. M., 1938, will be teacher of Biology and Chemistry in Buffalo Seminary, Buffalo, N. Y., during 1938-39.

Eugenia M. Gage, A. M., 1938, is now instructor in Music at Defiance College.

Alonzo G. Grace, A. B., A. M., University of Minnesota, 1917, 1920, Ph. D., Western Reserve, 1932, has recently been appointed Commissioner of Education in Connecticut.

Robert J. Hier, A. M., 1938, has accepted a position as teacher of Social Sciences in Alliance High School, Alliance, Ohio.

Elva Hunting, A. M., 1935, will be teacher of Latin and German at the College Preparatory School for Girls in Cincinnati during the year.

John I. Kolehmainen, A. B., Ph. D., 1933, 1937, is instructor in Modern European History at Heidelberg College.

James T. Lape, A. M., 1938, is teacher of English, High School, Wadsworth, Ohio.

Helen McCoy, A. M., 1938, is instructor in Public Speaking and Dramatics at Wilmington College, Wilmington, Ohio.

Mildred Rupp, A. M., 1938, will teach in Cleveland Heights High School during the current year.

David W. Russell, Ph. D., 1938, Instructor in Education at the National College of Education (Evanston) was a member of the summer session faculty at Northwestern University.

Ruth M. Sanderson, A. M., 1938, will be an instructor in Frances Shimer Junior College, Mount Carroll, Illinois.

William S. Shields, Ph. D., 1937, instructor at Adelbert College, 1937-38, will hold the same rank in Romance Languages at MacMurray College, Jacksonville, Illinois, during the coming year.

Jane E. Uprichard, A. M., 1938, has secured an appointment in Education at Briar Cliff College, Sioux City, Iowa.

Loretta L. Walker, Ph. D., 1936, has been appointed Instructor in German and Dean of Girls at Pennsylvania State College, Uniontown branch, Pennsylvania.

William H. Whitney, A. M., 1936, is now Assistant Professor of Business at Miami University, Oxford, Ohio.

GRADUATE SCHOOL APPOINTMENTS FOR 1938-1939

- ALBURN, HARVEY E., A. B., Western Reserve University, 1937; M. A., 1938. Fellow in Biochemistry.
- BAKER, ROBERT J., A. B., Western Reserve University, 1937. Assistant in Biology.
- BILLINGSLEA, FREDERICK Y., A. B., University of Toledo, 1933. Scholar in Psychology.
- BISHOP, JOHN W., A. B., DePauw University, 1938. Scholar in Chemistry.
- CALABRESE, ARTHUR B., B. S., University of Pittsburgh, 1935; M. S., Western Reserve University, 1938. Assistant in Biology.
- CHAMBERLAIN, NEIL W., A. B., Western Reserve University, 1937. Scholar in Economics.
- CLAPP, ELIZABETH V., A. B., Vassar College, 1923; M. S., University of Chicago, 1936. Assistant in Home Economics.
- DEMARINIS, FRANK, A. B., Western Reserve University, 1936; M. A., 1937. Assistant in Biology.
- DROPPERS, OLIVER J., A. B., Western Reserve University, 1938. Scholar in English.
- ECKARDT, ROBERT E., B. S., Antioch College, 1937. Fellow in Biochemistry.
- EMERY, BYRON E., B. S., University of California, 1936. Assistant in Pharmacy.
- ENDICOTT, ELIZABETH T., B. S., Wayne University, 1936; M. S., 1938. Fellow in Biochemistry.
- EVANS, ROBERT, B. S., Miami University, 1936; M. A., Western Reserve University, 1938. Assistant in Chemistry.
- FERNELIUS, GRANT R., B. S., University of Utah, 1935. Fellow in Chemistry.
- FREE, ALFRED H., A. B., Miami University, 1934; M. S., Western Reserve University, 1936. Teaching Fellow in Biochemistry.
- GRABILL, FRANK J., B. S., Wilmington College, 1935; M. S., Haverford College, 1936. Fellow in Biochemistry.
- GULBENKIAN, V. RICHARD, A. B., Western Reserve University, 1938. Scholar in English.
- HAIN, MARJORIE E., A. B., Pomona College, 1938. Scholar in Drama and Theatre.
- HARTT, JAMES, B. S., Grove City College, 1938. Assistant in Chemistry.
- HAWKINS, HUBERT H., A. B., DePauw University, 1938. Scholar in History.
- HEATH, ROY E., A. B., Albion College, 1936. Fellow in Chemistry.
- HELLER, MONROE L., A. B., Western Reserve University, 1937. Scholar in Psychology.
- HINE, J. BROOKS, A. B., Western Reserve University, 1938. Assistant in Physics.
- HODGMAN, MAGARET E., A. B., Western Reserve University, 1936; M. A., 1937. Assistant in Biology.
- HUIZENGA, JOHN W., A. B., Calvin College, 1936; M. A., Indiana University, 1938. Assistant in History.
- JENKINS, JOSEPH C., A. B., Marietta College, 1938. Scholar in Biology.
- LODGE, TOWNSEND, A. B., Oberlin College, 1929; M. A., Ohio State University, 1932. Fellow in Anatomy.
- MARTIN, DONALD R., A. B., Otterbein College, 1937. Assistant in Chemistry.
- MATHEWS, HELEN H., A. B., Western Reserve University, 1938. Scholar in Romance Languages.
- MCNABNEY, RALPH, B. S., University of Washington, 1933; M. S., 1935. Fellow in Chemistry.
- MELLORS, ROBERT C., A. B., Western Reserve University, 1937; M. A., 1938. Teaching Fellow in Biochemistry.
- MIDDAUGH, JOHN T., A. B., University of Western Ontario, 1938. Scholar in History.
- MILLER, FLOYD W., A. B., Findlay College, 1938. Scholar in History.
- MOORE, JIM K., B. S., University of Michigan, 1937. Fellow in Chemistry.
- MORRIS, LUCIEN E., A. B., Oberlin College, 1936. Teaching Fellow in Biochemistry.
- MORSE, RICHARD W., A. B., Oberlin College, 1934. Scholar in Music.
- NARAGON, ERNEST A., B. S., Mount Union College, 1936. Fellow in Chemistry.
- NIES, NELSON P., B. S., M. S., California Institute of Technology, 1935. Fellow in Chemistry.
- PHILLIPS, GWYNETH J., A. B., Marietta College, 1938. Scholar in Biology.
- RANDALL, FRANCIS E., A. B., Western Reserve University, 1936; M. A., 1938. Teaching Fellow in Anatomy.
- RATHBUN, EDWIN J., Ph. G., University of California, 1933; B. S., 1934. Assistant in Pharmacy.
- RAYBACK, JOSEPH G., A. B., Western Reserve University, 1935; M. A., 1936. Assistant in History.
- REDINGER, RUBY V., A. B., Fenn College, 1936; M. A., 1937. Fellow in English.
- SCHLEY, MARGARET T., A. B., Western Reserve University, 1938. Scholar in Romance Languages.
- SCHNEIDER, PAUL L., B. S., Western Reserve University, 1938. Scholar in Music.
- SCHUMAN, LEONARD M., A. B., Oberlin College, 1934. Fellow in Hygiene and Bacteriology.
- SEABRIGHT, CLARENCE A., A. B., Ohio State University, 1935. Fellow in Chemistry.
- SEEGMILLER, CHARLES G., B. S., University of California, 1935. Assistant in Chemistry.
- SIMON, CHARLES E., A. B., Western Reserve University, 1938. Scholar in Romance Languages.
- SMITH, WM. RUSLER, A. B., Miami University, 1935; M. S. Western Reserve University, 1937. Assistant in Chemistry.
- SNYDER, MAGARET M., A. B., Elmira College, 1938. Scholar in Biology.
- STONE, MARY E., A. B., Ohio University, 1937. Wilbur Fellow (W. R. H. S.) in English.
- SULLIVAN, WILLIAM R., A. B., Western Reserve University, 1937. Assistant in Biology.
- SWISHER, DOLLIE M., B. S., West Virginia University, 1938. Scholar in Home Economics.
- TAFT, ROBERT F., A. B., University of Pittsburgh, 1936; M. A., 1938. Assistant in History.
- TAYLOR, JAMES E., A. B., Western Reserve University, 1938. Assistant in Physics.
- VELTMAN, PETER, A. B., Hope College, 1938. Scholar in English.
- VER WIEBE, EUGENIA, A. B., University of Wichita, 1938. Scholar in Psychology.
- WATTS, NELLIE P., B. S., Philadelphia College of Pharmacy and Science, 1936; M. S., 1937. Assistant in Pharmacy.
- WEHNER, RALPH S., B. S., Mount Union College, 1931. Scholar in English.
- WHITE, MARTHA, A. B., Syracuse University, 1938. Wilbur Fellow (W. R. H. S.) in Drama and Theatre.
- WINSTON, JOSEPH S., A. B., Western Reserve University, 1938. Scholar in History.
- YANKO, JOHN A., B. S., Geneva College, 1937. Scholar in Chemistry.

The Key To Recovery

Russell Weisman, *The Key to Recovery*, North American Publishing Company, 147 pp., \$1.50.

Professor Weisman, in this compact book, explains in 105 pages how we got into the present phase of the Great Depression and in 40 more pages points the way to sound recovery. It is as clear as a fireside chat in its factual diagnosis of our disease and convincing in its prescription of effective remedies. The starting point of the book is March, 1933, because "the inauguration of Franklin D. Roosevelt as President marked an epoch, not only in the cyclical movement of American business, but also in the attitude of the government of this nation toward commercial and financial activities."

Even careful observers of public affairs will find their recollection of the past five years greatly refreshed by this orderly presentation of the administration's efforts to promote recovery by monetary inflation, agricultural adjustment, NRA, public works, and the creation of "purchasing powers." The chapter on the New Deal reform program covers protection of investors, regulation of income distribution, the Tennessee Valley Authority, and the Labor Relations Act, with an analysis and judgment of each. There is an informing chapter on the "Boomer of 1936 and 1937" that will clarify the reader's thinking, and an especially good account of the "Depression of 1937-38" which Professor Weisman was the first financial writer to forecast, on March 24th. He shows the severity of the decline in industrial activity, the state of the financial markets, the capital log jam, the destruction of capital and the results of capitalism without capital. The first four chapters prepare the reader for the fifth and last on The Key to Recovery. Among the essentials are revisions of the Federal revenue act, a fiscal policy conducive to recovery, a sound currency, fair employer-employee relations, reopening of broad world markets, and restoration of flexibility to private industry. Here is the quintessence of sound economics clearly presented.

This book ought to be on "the must" list of every person who has the long-time interest of his country at heart. It will help keep his thinking clear in spite of the prevalent confusions of voices.—C. C. A.

The Research Work of Candidates for the Degree of Doctor of Philosophy at Western Reserve University, 1938

In June 1938, thirteen candidates received the degree of doctor of philosophy. This is the highest degree conferred by the Faculty of Arts and Sciences (the Graduate School) and represents three or more years of intensive training beyond the bachelor's degree (B. A. or B. S.). A dissertation or thesis is an important part of the training. Two copies of each dissertation are bound and placed in the University Library for public use. By inter-library loans they are now available for reading anywhere in the United States. The dissertations represent the result of training in research. In the preparation the student is guided by an adviser appointed for the purpose, and his conclusions are subjected to the approval of a Faculty committee. It should be borne in mind that such work is sometimes, almost always, on the frontier of human knowledge and commonly too advanced for any but experts in a field.

MARGARET ROWLANDS BARNES
A. B., Mather College, 1927, with Professor L. Dewey Anderson, Department of Psychology, as adviser, made a study of *Children's Explanation of Natural Phenomena*. This research represented a psychological examination of children's attempts to explain why it rained, the nature of clouds, the difference between plants and animals, and other like observable facts. One hundred eighty children, ninety boys and ninety girls, from the elementary schools of a neighboring city were the subjects. The ages ranged in three groups, five, seven and nine years. The questions asked concerned (1) the nature, origin, animism, and sentiency of certain phenomena, (2) the prediction of the operation of natural laws and their explanation after demonstration of experiments involving the laws, and (3) the explanation of causal relations as they operate in nature. The results negatived certain earlier hypotheses of psychologists and cleared up some border line points on age and sex differences in responses and reasoning as affected by experience and the intelligence of young children. Dr. Barnes is Psychologist at the Lakeside Hospitals.

ARTHUR TAYLOR CARR, Ph. B., Mount Union College, 1909, working in the Department of Education and with Professor G. Carlton Robinson as his ad-

viser, presented a dissertation on *Samuel Lewis: Educational and Social Reformer (1799-1854)*. Samuel Lewis both as a member of the General Assembly and as State Superintendent of the Common Schools was a leader in the development of the public school system of Ohio. Dr. Carr's contribution to the History of Education in the United States was an appraisal of the influence of Samuel Lewis and a history of the public school system in Ohio for the first half of the nineteenth century. The author concludes that the public school system of Ohio "has more of the plan and thought of Samuel Lewis than of any other man."

Dr. Carr is Principal of Nathan Hale Junior High School in Cleveland.

RALPH EARL CROW, B. S., Mount Union College, 1922, with Professor Clarence B. Allen as adviser, carried out as his assignment in research a *Study of the High School Student-Aid Program of the National Youth Administration*. The investigations covered four major questions: (1) objectives and organization of the student aid program, (2) characteristics of the N. Y. A. students (3) effect of the program on the pupils and the school, and (4) ways in which the program may be improved. There are 3000 N. Y. A. students in seventy secondary schools in Cuyahoga County. The study covers representatives of sixty-three of these high schools. The author finds, for example, that the N. Y. A. students resemble other high school students in most respects but they like high school better, fewer plan to attend college, they are more concerned about securing a job, and they complain less about homework. Thirty per cent, two and one-half times as many as for non-N. Y. A. students, come from broken homes, twice as many are colored, and financial need is greater. Principals, teachers, and pupils offer a significant list of suggestions for improvement. Dr. Crow is Supervisor of Student Aid in the Department of Adult Education, Cleveland Board of Education.

OTTO J. KORB, B. S., Kent State University, 1918, submitted in partial fulfillment of the requirements for the doctor's degree in Education a dissertation on the *Reorganization of School Districts for Cuyahoga County*. Professor David P. Harry supervised the research of Dr.

Korb. The purpose of the author was threefold: to select a set of criteria derived from all the previous investigations . . . which deal with the size of school administrative units, to consider all the present school districts in Cuyahoga County in terms of their financial structure, their historical evolution, the pupils served and the program offered, and to suggest other possible reorganizations of the school districts both in the light of the criteria accepted and the evaluations of the present districts." A plan is presented for the reduction of the county school districts from thirty-four to fourteen and for administrative reorganization with notable administrative economies. Dr. Korb is Superintendent of Schools in South Euclid, Ohio.

JOANNE HOUCK MANCIN, A. B., Heidelberg College, 1929, preparing her dissertation in the Department of French, with Professor J. L. Borgerhoff as her adviser, offered a critical appraisal of the *Life and Works of Madame de Noailles (1876-1933)*. Madame de Noailles, of Greek and Roumanian parentage, was born and reared in France, but her culture was predominantly Eastern, almost Oriental, and her outlook on life was similarly exotic. The research of Dr. Mancin is based on the study of Madame de Noailles' published works—nine volumes of poetry, three novels, two volumes of short stories and sketches or essays. "With the books of Collette, they represent a frankness unparalleled in the writing of French women since the nineteenth century." The monograph compares her poetry with that of Louise Lake and Marceline-Desbordes Valmore, and rates Madame Noailles as the third great muse born in France. Dr. Mancin (Mrs. Arnold A. Mancin) is a housewife.

GEORGE HAROLD MANGUN, B. S., Montana State College, 1934, majoring in Biochemistry, and with Professor Victor C. Myers as adviser, wrote a dissertation on *The Relation of Creatine to Phosphorus and Potassium in Cardiac and Voluntary Muscle*. The research established the relationship of these three constituents in cardiac and voluntary muscle of animals and man. Cardiac muscle was shown to lose these substances during cardiac decompensation in proportions suggesting their origin from the breakdown

of dipotassium phosphocreatine, a substance essential to muscular contraction. It was suggested that although excess creatine, phosphorus and potassium were made available they could not be taken up by heart or voluntary muscle unless the nutritive conditions of the tissues permitted the resynthesis of this compound. Dr. Mangun is Instructor in Biochemistry, School of Medicine.

FRANCIS CARL MERICOLA, B. S., Kent State University, 1933, working under Professor Harold S. Booth in Chemistry, offered in partial fulfillment of the requirements for the degree a thesis on *The Fluorination of Thionyl Chloride*. Thionyl chloride is a colorless liquid with a strong choking odor and is hydrolyzed by moisture. Fluorination of thionyl chloride yielded a new gas, thionyl chlorofluoride, and another gas previously little studied. The chemical and physical properties of these gases were established. The new gas is very toxic and is being considered for use in the destruction of rodents. Dr. Mericola is at present research chemist for the Michigan Alkali Company, Wyandotte, Mich.

HUGH VICTOR PERKINS, Ph. B., Wooster, 1917, investigated *Pupil Participation in Elementary School Control*. Professor Clarence B. Allen was his adviser. Dr. Perkins undertook to summarize the extent, nature, purposes, and trends of pupil participation in control of the elementary schools in the United States. The study treats only those activities through which children (1) may assist in guiding the conduct of the pupil body, (2) may co-operate in fostering those aspects of school spirit which they believe are desirable, and (3) may share responsibility for the activities which they help to conduct. It is not a general investigation of extra-curricular or curricular activities. Activities such as clubs, newspapers, assembly programs, and excursions are not included. The results are presented by a description of the activities in a typical school, and by a comprehensive body of conclusions and statement of problems still unanswered. Dr. Perkins is Principal of Boulevard Elementary School, Cleveland Heights.

LOUIS PILLEMER, B. S., Duke University, 1932, received his doctorate in Bio-chemistry. His thesis was written un-

der the direction of Associate Professor Enrique Eduardo Ecker (Immunology), subject — *A Contribution to Certain Chemical Aspects of Immune Phenomena*. The correlation of oxido-reduction mechanisms to certain immune reactions was presented. Evidence was produced which elucidated several of the complex mechanisms associated with immune phenomena.

Complement, a lytic substance, normally present in blood, was shown to be controlled by oxidation and reduction. The possibilities of practical applications from these studies are discussed. Dr. Pillemer is Demonstrator of Immunology, Institute of Pathology.

DAVID WESLEY RUSSELL, B. S., University of Pennsylvania, 1926, carried on his research under the direction of Professor David P. Harry in Education. The subject of his dissertation was *Analysis of Opinions and Practices Concerning the Teaching of Science in the Elementary Grades*. The growing mass of divergent and even caustic opinions concerning science in the elementary grades indicated the need for such a study. The analysis of opinions gathered from specialists and school administrators covered thirteen controversial topics—Justification for Elementary Science, Selection of the Fields of Science, Providing Learning Experience, Curriculum Content, Relation of Science to Other Subjects, Utilization of Space and Equipment, Uses of Textbooks, Allotment of Time for Science, Choice of the Science Teacher, Supervision of Elementary Science, Evaluation of Children's Achievement, Value of Radio Broadcasts, and Naming the Science Program. Dr. Russell is Instructor in Education and Director of the Junior High School, National College of Education, Evanston, Illinois.

EDWARD EUGENE SENSEL, A. B., Oberlin, 1934, presented a dissertation on *The Action of Aluminum Bromide on Normal Heptane*. Professor Robert E. Burk, Chemistry, guided him through the necessary investigations. The action of anhydrous aluminum chloride and anhydrous aluminum bromide on the hydrocarbons, previously studied by a large number of investigators, was carried into new phases by carefully controlled experimental conditions. Aluminum bromide belongs to a family of "catalysts" which

are particularly versatile and powerful. They can change one type of hydrocarbon into another. This has potentialities not only for improving gasoline but in synthesizing new starting materials for the chemical industry. Dr. Sensel is Research Chemist for the Texas Company, Beacon, N. Y.

THOMAS CLOGG SURRENDER, B. S., Baldwin-Wallace, 1928, receiving his doctorate in Biology, offered a dissertation on the *Inheritance and Expression of Mottled-eyed Mutant in Drosophila Melanogaster*. Associate Professor Amos H. Hersh directed the experimentation. Mottled flies were used for this study in inheritance, or genetics. By a controlled procedure the author showed that mottled acts as a Mendelian recession and phenotypically non-mottled flies (as a result of temperature) produce mottled progeny if the pupae are placed at suitable temperatures. Dr. Surrender was able to show that during the development of the egg there is a short period during which the mottled character is fixed. But the mottling becomes visible only later, shortly before the fly emerges. Such studies lead to a knowledge of how the genes in the egg produce their effects during development and open up the possibility of the ultimate control of embryonic development. Dr. Surrender is Assistant Professor of Biology at Baldwin-Wallace College.

PAUL EDGAR WILLIAMS, A. B., Ohio Wesleyan, 1920, working under the direction of Professor G. Carlton Robinson, in the Department of Education, prepared a thesis on *The Y. M. C. A. College*.

The author subjected the colleges of this type to a detailed analysis as a basis for possible changes and new directions for effort. Twenty-three colleges were chosen for study, those with the most highly developed curriculum program and organization. The dissertation includes a brief history of development, an analysis of the present status of these institutions in aims, control, finance, faculty personnel, administration, curricula, students, plant and extra-curriculum activities, and comparisons of procedure with those of other colleges and with standard practice. The study serves to give a background of facts for further investigation and for re-planning by the officials of the Y. M. C. A. colleges. Dr. Williams is Director of Jefferson College, St. Louis, Missouri.

PUBLICATIONS OF THE UNIVERSITY FACULTIES

During the past year nearly two hundred members of the Faculties of Western Reserve University and others holding special University appointments reported the publication of twenty-three books, the same number of edited works, and over three hundred fifty articles. They delivered approximately four hundred addresses before scholarly associations. Participation in the work of learned and civic societies was indicated in the fact that one hundred two of the reporting members hold offices of responsibility in the societies. The following columns chiefly report some of the studies published by the Faculties during the period May 1, 1937-May 1, 1938.

Anatomy and Physical Anthropology

Professor T. Wingate Todd, President of the American Association of Physical Anthropologists and Vice-President of the American Anatomical Association, published *Atlas of Skeletal Maturation: Part I: Hand* (St. Louis: Mosby), and nine scientific articles as follows: "Orthodontic Implications of Physical Constitution in the Child," *International Journal of Orthodontia*, XXIII; "The Scientific Influence of Sir Grafton Elliot Smith," *American Anthropologist*, XXIX; "The Mineralization Problem in Orthodontics" and "The Constitution of the Normal Child," *Angle Orthodontist*, VII; "Objective Ratings of the Constitution of the Growing Child Based on Examination of Physical Development and Mental Expansion," *American Journal of Diseases of Children*, LV; "Facial Growth and Pharyngeal Health," *Journal of the Baltimore College of Dental Surgery*, I; "Shadows in the Mirror of Health," *New York State Journal of Medicine*, XXXVII; "The Significance of Developmental Growth Studies in Evaluation of Clinical Allergy," *Journal of Allergy*, IX; and "Certificates of Growing Up and Growing Old," *Ohio Journal of Science*, XXXVIII.

Dr. Carl C. Francis's Book, *Fundamentals of Anatomy*, has been published by

Mosby of St. Louis; to the *Physiotherapy Review*, XVII, he contributed "Physiotherapy and the Growing Child," and to *Angle Orthodontist*, VII, "Analysis of Encroachments on the Constitution."

Miss Katherine Simmons, Statistician, Brush Inquiry, read a paper, "Current Studies in Increment of Stature and Weight," before the Pittsburgh meeting of the Association of Physical Anthropologists.

Applied Social Sciences

To the Yale volume, *Studies in the Science of Society*, edited by George P. Murdoch, Dean James Elbert Cutler, Chairman of the section of Sociology and Social Work of the American Sociological Society, and President of the Ohio Valley Sociological Society, contributed "Social Work in the Light of Societal Evolution." For the *Educational Record* of January 1938 Dean Cutler wrote "Professional Education."

The Western Reserve University Press has published a booklet, *The CCC Through the Eyes of 272 Boys*, by Associate Professor Helen M. Walker.

Associate Professor Grace L. Coyle, Vice-President of the National Conference of Social Work, has an article, "Group Work and Social Action," in the October 1937 issue of *Social Work Today*. Before the American Sociological Society and the New York and Ohio State Conferences on Social Work she discussed theories of group behavior basic to group work experience, the common objectives of labor and social work, and education for social action.

"Differential Approach to the Treatment of Children," by Associate Professor Ruth Gartland, a member of the Executive Committee of the American Association of Psychiatric Social Workers, appeared in the *News-Letter* of the American Association of Psychiatric Social Workers, IV.

Assistant Professor Gertrude Wilson, Chairman of the Committee on Case Work

and Group Work of the Cleveland Welfare Federation, contributed "Co-operative Service of Case Work and Group Work" to the *Bulletin* of the Visiting Teachers' Association (June 1938), and "The Interplay of the Insights of Case Work and Group Work" to *Proceedings of the National Conference of Social Work* (1937).

The *Ohio Welfare Conference Bulletin* for October 1937 published "What Skills Does the Social Case Worker Need?" by Assistant Professor Marcella S. Farrar; last year Miss Farrar addressed the National Conference of Social Work.

Assistant Professor Vocille M. Pratt, a member of the National Committee on Study of Visiting Housekeeper Service of the United States Children's Bureau, and of the program committee of the American Home Economics Association, published two articles in *The Family* during 1938: "Home Economics Consultation Service to the Community," and "The Significance for the Case Worker of Rural Cultural Patterns."

Public Health Nursing for September 1937 published "Building for Health in a Secondary School" by Miss Ethel C. Ryckman.

In April 1938 Miss Hazel Higbee addressed the Ohio State Nurses Association.

Art

Professor Thomas Munro, Chairman of the Committee of the *Art Education Yearbook*, published two articles: "The Art Museum and the Secondary School," in *Progressive Education* (November 1937), and "Modern Art and Social Problems," in *Art Education Today* (1938), the latter being an address delivered last year before the National Education Association.

Biochemistry

Investigations in biochemistry have been characterized by directed group work. *The Journal of Laboratory and Clinical Medicine* has published the results of five investigations: "The Acid-Base Balance of the Blood in Migraine," XXII, by Associate Professor Edward Muntwyler, Professors V. C. Myers and C. T. Way, and Dr. Wayne H. Daniel-

son; and four articles on "Guanidine-Like Substances in Blood," XXII, XXIII, by Dr. J. E. Andes, Professor Myers, Dr. C. R. Linegar, and Mrs. J. E. Andes. The *Journal of Biological Chemistry*, CXXIII, published the results of two other investigations: "Chemical and Immunological Studies of the Effect of Radiant Energy and of Oxidation on Crystalline Urease," by Dr. Louis Pillemer, Associate Professor E. E. Ecker, Professor V. C. Myers, and Associate Professor Muntwyler; and "The Creatine Content of Cardiac and Voluntary Muscle and Its Relation to Phosphorus and Potassium," by Dr. George Mangun and Professor V. C. Myers. The *Archives of Internal Medicine*, LXI, published "Variation in the Creatine Content of Human Cardiac and Voluntary Muscle Obtained in an Autopsy," by Drs. C. R. Linegar, T. T. Frost and V. C. Myers.

"Evaluation of the Practical Use of the Aschheim-Zondek Pregnancy Test," by Dr. J. W. Mull and Dr. H. D. Underwood, appeared in the *American Journal of Obstetrics and Gynecology*, XXXIII. Dr. Mull, in collaboration with Dr. J. T. Smith, reported on the "Effect of Sulfanilamid on the Oxygen Capacity of the Blood," in the *Journal of the American Medical Association*, CX.

Biology

The second edition of *Audubon the Naturalist: A History of His Life and Time*, the 1000-page definitive study by Professor Emeritus Francis H. Herrick, has appeared in a one-volume dress. An article, "Audubon and the Dauphin," was published in *The Auk*, LIV.

Associate Professor A. H. Hersh contributed "On the Order of Relative Growth Intensities" to *Science*, LXXXVII.

Dr. B. G. Anderson, Hyman Lumer and L. J. Zupancic reported on "Growth and Variability in *Daphnia Pulex*" in the *Biological Bulletin*, LXXIII.

Business and Economics

Professor C. C. Arbuthnot, Chairman of the Advisory Council of the Ohio State Employment Service in affiliation with the United States Employment Service, addressed the American Fair Trade League in New York City last April.

In the *Harvard Business Review*, XVI, for the spring of 1938, appeared Assistant Professor Marvin J. Barloon's study of "The Unemployment Trust Fund."

Associate Professor Thomas M. Dickerson, C. P. A., wrote "Allocation of Stock Dividends in Accounting for Estates and Trust Companies" for *Trust Companies* (December 1937).

Chemistry

Professor Robert E. Burk's book, *Polymerization*, was published late in 1937. Professor Burk is Chairman of the National Research Council's committee on catalysis.

Introduction to the Theory and Practice of Quantitative Chemical Analysis by Professor H. S. Booth and Dr. V. Richard Damerell is in its second edition.

"Thermodynamic Properties of the Hexyl Alcohols II," by Associate Professors Frank Hovorka and Herman P. Lankelma and Dr. S. C. Stanford, has been printed in the *Journal of the American Chemical Society*, LX. With Associate Professor E. E. Ecker and Mr. W. Rusler Smith, Dr. Hovorka reported on "Observations on the Action of Potassium Mercuric Iodide" in the *Modern Hospital*, XLIX. *Industrial and Engineering Chemistry*, XXIX, includes "Electrode Potentials and Their Relation to Corrosion of Alloys and Metals in Lubricating Oils," by Dr. Hovorka and Mr. John K. Anthony.

Classics

Professor Clarence Powers Bill's free translation of *Miles Gloriosus* into English, with reference to modern life and affairs, was put on the stage in a series of performances by the Federal Theatre Project of Florida. Before the Ohio Classical Conference Professor Bill delivered an address "Epidaurus: History and Architecture."

Professor Kenneth Scott's articles for the year include: "Caesar Augustus" in the *Classical Outlook*, XV; "The Postage Stamps of the Augustan Bimillennium" in the *Classical Journal* XXXIII, and "Die Regierung von San Marino" in *Deutschland's Erneuerung*, XXII. During the Summer Session of 1937 Professor Scott lectured on the Augustan Age in the In-

stituto Interuniversitario Italiano; he also twice addressed the Centro Italiano di Studi Americani in February 1938.

Drama

Professor Barclay S. Leathem was elected President of the American Theatre Association for 1938 and a member of the Executive Committee of the National Theatre Conference for a three-year period.

Dentistry

The *Proceedings of the American Association of Dental Schools* for 1937 included "Materials and Equipment for Instruction in Histology and Embryology in a Dental School" by Associate Professor Samuel W. Chase.

"The Technique of Dental Filming" by Assistant Professor James E. Bliss was published in *Movie Makers Magazine*, XII. Professor Bliss' Educational and Teaching Motion Pictures produced for the University the past year include the following releases: "Moulage for Masks," "Oral Surgery for Immediate Dental Technique," "Technique for Construction of an Anterior Fixed Bridge," and "New Books for Old."

Mr. P. B. Taylor addressed the American Association for the Advancement of Science, December 27, 1937, on "The Distortion of Invested Wax Patterns," and the International Association for Dental Research, March 12, 1938, on "Vulcanite Porosity."

Education

An article by Dean Harry N. Irwin, "The Organization of Teacher-Preparation in a University," was published in *Educational Administration and Supervision*, XXIII.

Associate Professor May Hill Arbuthnot, review editor of children's books for the *Journal of Childhood Education*, has an article in the November 1937 issue, "What, Reading Aloud!" During the year Mrs. Arbuthnot addressed educational groups in Texas, Pittsburgh, Fort Wayne, Erie, and Cincinnati.

At the meeting of the American Association of Childhood Education at Cincinnati, April 22, Miss Constance H.

Barker spoke on "Creative Work in the Language Arts."

English

Professor Finley Foster has returned from a summer in England where he snapped over twelve hundred pictures, many of them for use in a new course in the Graduate School, "English Literature and English Art: A Study of Interrelations," as well as in undergraduate courses.

Assistant Professor Harold A. Blaine was special lecturer on American literature at the University of Debrecen, Hungary, this summer.

Professor J. DeLancey Ferguson has edited *Men and Moments: A Book of Living Narratives* (New York: The Cordon Company, 1938); his scholarly articles during the year include "Burns and Jean Armour: Notes on Some New Material" in *The Scotsman* (July 1937); "Two Phantom Kipling Books," in the *Kipling Journal* (Spring 1938); "Huck Finn Aborning" in *The Colophon* (Spring 1938); and "The Limits of Confidence" in *The Scots Magazine* (April 1938).

Professors DeLancey Ferguson and Harold A. Blaine of this University and Wilson R. Dumble of Ohio State have jointly published a collection of short stories to illustrate changes in narrative technique which the short story has undergone during the past century, *Theme and Variation in the Short Story*.

American Sketchbook, a volume of regional selections collected by Professors Tremaine McDowell (University of Minnesota), Winfield H. Rogers (Western Reserve University), John T. Flanagan (University of Minnesota), and Harold A. Blaine (Western Reserve University) printed by the Macmillan Co. (1938), has already been adopted by a number of universities and colleges. Professor Rogers delivered a paper, "Beyond Technique," before the prose fiction group at the last meeting of the Modern Language Association.

Associate Professor William Powell Jones, continuing his studies of Thomas Gray and his time, contributed "The Vogue of Natural History in England,

1750-1770" to *Annals of Science*, II, and "Thomas Gray's Library" to *Modern Philology*, XXXV.

A bibliographical study, "On Using Johnson's *American First Editions* and Other Sources," by Lyon N. Richardson, Assistant Professor, appeared in *American Literature* (January 1938).

Assistant Professor George R. Kernodle contributed "The Outdoor Setting" to *Theatre Arts Monthly* (July 1937).

Geography and Geology

"Lantern Slide Technique in Geography Instruction" by Villa B. Smith was published in the *Educational Screen*, XVI.

German

Assistant Professor Hugo K. Pohl delivered an illustrated lecture, "In deutschen Lande, der deutschen Sprache," before the German division of the Northeastern Ohio Teachers Association.

Health Service

To the *American Review of Tuberculosis*, XXXVI, Dr. Lee H. Ferguson contributed "A Five-Year Review of Tuberculosis in College Students."

Histology and Embryology

Professor F. C. Waite has recently published a number of articles pertaining to the history of medicine and science: "A Contract for Private Medical Teaching in Northern Ohio in 1846," *Ohio State Medical Journal*, XXXIII; "Medical Degrees Conferred in the American Colonies and in the United States in the Eighteenth Century," *Annals of Medical History*, IX; "An Early American Poem on Dentistry," *Journal of the American Dental Association and the Dental Cosmos*, XXIV; "The Second Medical School in Ohio, at Worthington 1830-40," *Ohio State Medical Journal*, XXIII; "Significant Dates in the History of the School of Medicine, Western Reserve University," *Clinical Bulletin of the University Hospitals of Cleveland* (January 1938); "The Degree of Bachelor of Medicine in the American Colonies and the United States," *Yale Journal of Biology and Medicine*, X. For the *Reserve Record* Professor Waite contributed papers on the teaching of astronomy, mathematics and associated subjects

in the early days of Western Reserve College.

History

The First Four Decades: Goodrich House, by Professor Emeritus Henry E. Bourne, has been issued as a booklet, printed by The William Feather Co. for the Goodrich Social Settlement. Professor Bourne's address on the history of Flora Stone Mather College will shortly appear in a special University *Bulletin*.

Among the many addresses of Associate Professor Jacob C. Meyer were two delivered before the International School, Geneva, Switzerland, in October 1937, on "The Eighteenth Assembly of the League of Nations."

Assistant Professor Meribeth Elliott Cameron's article on "The Basic Course in Far Eastern Studies" is in *Notes on Far Eastern Studies in America*, I, a new periodical issued by the American Council of Learned Societies. During April Dr. Cameron lectured on Far Eastern affairs before the Ohio Academy of History at Columbus and the American Oriental Society at Philadelphia.

Household Administration

Research projects on which the department reported this year are characterized by group work. "The Influence of a Daily Serving of Spinach or Its Equivalent in Oxalic Acid Upon the Mineral Utilization of Children," by Priscilla Bonner, Frances C. Hummel, Mary F. Bates, Dr. Icie G. Macy of the Children's Fund of Detroit, Michigan, and Acting Professor Helen A. Hunscher of Western Reserve University, appeared in the *Journal of Pediatrics*, XII. "Diffraction Studies of the Effect of Sodium Fluoride and Parathormone Upon the Incisors and Tibiae of Rats," by Drs. Lawrence Reynolds, Kenneth E. Corrigan, and Henrietta S. Hayden, of Harper Hospital, Detroit, and Drs. Macy and Hunscher, was published in the *American Journal of Roentgenology and Radium Therapy*, XXXIX. "The Basal Metabolism in Pregnancy," by Dr. Joseph Johnston of Henry Ford Hospital, Detroit; Professor Frances C. Hummel, Mary F. Bates, Priscilla Bonner and Dr. Macy appeared in the *Journal of Nutrition*, XV; and "Is

Skeletal Maturity Related to Calcium Storage in Children?" by Drs. Hunscher, Hummel, Macy, Professor T. Wingate Todd and Dr. C. C. Francis was printed in the *Proceedings of the American Society of Biological Chemists* (1937). Professor Hummel is Secretary of Foods and Nutrition Division, American Home Economics Association as well as Chairman of the Nutrition Committee of the Cleveland Welfare Federation.

An article by Mrs. Helen M. Jordan, "Programs of Study and Research," was published in *Parent Education*, III. Mrs. Jordan has been elected President of the Ohio Home Economics Association for 1938-40.

In June 1938 the Welfare Federation of Cleveland published *Child Nutrition in Camp and Institution* by Mrs. G. C. Ball as a 300-page lithoprinted manual. Mrs. Ball's articles for the year include "Co-operation Between University Training Course and Public School Lunchrooms" in *Practical Home Economics*, XV; "A New Field for Home Economics Workers" in the *Journal of Home Economics*, XXIX, and "Diet in Babyhood" in *Public Health Nursing*, XXX.

Mrs. Ethel Laney's daily column on home economics appears in the *Cleveland Plain Dealer*, the Louisville *Courier-Journal*, the *Erie Times*, the *Mercury Herald* of San Jose, Calif., the Newark, N. J., *Star-Times*, the *Calgary Herald* and the *Dayton Herald*.

Hygiene and Bacteriology

Professor J. A. Doull, President of the American Epidemiological Society (1938-39), contributed the chapter, "Salient Features in the Epidemiology of Leprosy" to *Tuberculosis and Leprosy, the Mycobacterial Diseases*, Symposium Series, I, 1938, of the American Association for the Advancement of Science. Dr. Doull also wrote the chapter, "Prevention of Respiratory Diseases," to *Practitioners' Library of Medicine and Surgery*, XII, 1937. His articles in journals include "Racial Immunity to Diseases" in *Journal of Negro Education*, VI; "Present Status of Active Immunization Against Whooping Cough" in *Journal of Pediatrics*, XII; and, with

Hulda Bancroft, "The Trend of Syphilis in Cleveland" in the *Clinical Bulletin of the University Hospitals* (March 1938).

Law

Professor Fletcher Reed Andrews, recipient of the Sterling Fellowship for graduate work at Yale Law School for 1938-39, published in the *Cincinnati Law Review* for May and November 1937 and January and May 1938 parts of the "Ohio Annotations to the Restatement of Conflict of Laws."

Library Science

Dean Herbert S. Hirshberg addressed the American Library Association Conference in New York City last year, at which time he was elected vice-president of the association.

Prairie Girl, a middle-western novel for girls, by Associate Professor Lucile F. Fargo, has been published by Dodd Mead. Dr. Fargo also edited the section on "The High School Library" for the *Report of the National Committee on Research in Secondary Education*. She is a member of three committees of the American Library Association.

Mathematics

Professor J. Rogers Musselman contributed "On Four Lines and Their Associated Parabola" to the *American Mathematical Monthly*, XLIV; and, with F. Morley, "On Qn Points With a Real Cross-Ratio" to the *American Journal of Mathematics*, LIX.

Medicine

Studies published during the year by Dr. I. M. Hayman, Jr., Associate Professor of Medicine, are: "An Anatomical and Physiological Basis for the Interpretation of Kidney Function Tests," with Dr. J. W. Martin, Jr., in *Transactions of the Association of American Physicians*, LII; "Comparison of the Analgesic Action of Pantopon and Morphine Sulphate," with Dr. Herbert Fox, in the *Journal of the American Medical Association*, CIV; and "The Effect of Intraperitoneal Injections of Ringer's Solution on Kidney Weight in Rats," with Dr. Paul L. Stier, in the *American Journal of Physiology*, CXXXI.

With Dr. C. S. Beck, Assistant Professor Harold Feil published "The Con-

sideration of the Artificial Development of Collateral Coronary Circulation by Surgical Means" in *Modern Concepts of Cardiovascular Disease*, VI, and "The Treatment of Coronary Sclerosis and Angina Pectoris" in the *Journal of the American Medical Association*, CIX. With Dr. L. N. Katz, Dr. Feil's "Clinical Observations on the Dynamics of Ventricular Systole" appeared in the *American Journal of Medical Science*, CXCVI.

"Panmyelophthisis with Hemorrhagic Manifestations in Rats on a Nutritional Basis," by Dr. Paul György, Professor Harry Goldblatt, Assistant Professor Franklin R. Miller, and Dr. Robert Fulton, was published in the *Journal of Experimental Medicine*, LXVI. Dr. Miller, with Dr. W. H. Pritchard, also reported on "Presence in Milk of the Extrinsic Factor of Castle" in *Proceedings of the Society for Experimental Biology and Medicine*, XXXVII.

Two articles by Assistant Professor R. F. Parker appeared in *Journal of Experimental Medicine*, LXVII: "Immunological Studies of a Heat-Stable Substance Isolated from Tissues Infected with Vaccine Virus" and "Statistical Studies of the Nature of the Infectious Unit of Vaccine Virus."

Dr. Robert W. Heinle has the following articles in the medical journals: "The Site of Interaction of Intrinsic and Extrinsic Factors in Pernicious Anemia" (with William B. Castle), *Journal of Clinical Investigation*, XVI; "Correlation of *In Vitro* Activity of Normal Human Gastric Juice on Casein" (with F. H. L. Taylor, W. B. Castle and M. A. Adams), *Proceedings of the Society of Experimental Biology and Medicine*, XXXVI; "Observations on the Etiologic Relationship of Achylia Gastrica to Pernicious Anemia" (with W. B. Castle, C. W. Heath, and M. B. Strauss), *American Journal of the Medical Sciences*, CXCVI, and (with F. H. L. Taylor, W. B. Castle, and M. A. Adams) *Journal of Clinical Investigation*, XVII. *The Clinical Bulletin of the University Hospitals of Cleveland*, II, has an article by him on "The Blood Picture in Rats with Experimental Liver Disease."

Music

Fundamentals of Musicianship, I, abridged edition, by Smith, Krone, and Schaeffer, was issued by M. Witmark & Sons, New York, in September 1937. Dr. Schaeffer's "Status of Music Theory Instruction in Secondary Schools" was published in the *Yearbook of the Music Educators' National Conference* (May 1938).

Nursing

Dean Marion Gertrude Howell, Vice-President of the National Organization for Public Health Nursing and of the Association of Collegiate Schools of Nursing, addressed the American Public Health Association in New York in October 1937 on "Preparing the Nurse to Meet Community Needs in Public Health," which was published in May 1938 in the *American Journal of Public Health*.

Associate Professor Anne L. Austin, Vice-President of the Ohio League of Nursing Education, contributed the chapter, "Nursing in Its Community Relationships," to *An Introduction to the Principles of Nursing Care*, edited by Martha Ruth Smith (J. B. Lippincott Co., 1937), and "The Use of the Panel Discussion Method in Nursing" to the *Ohio Nurses Review*, XII.

Obstetrics and Gynecology

"Panhysterectomy," by Professor William H. Weir, an address before the Ohio State Medical Association, has been published in the *Ohio State Medical Journal*, XXXIV.

Pathology and Immunology

Publications of Professor Howard T. Karsner for the year include: "Primary Inflammation of Arteries," *Annals of Internal Medicine*, XI; "Gross Morbid Anatomy in the School of Medicine, Western Reserve University," *Journal of Technical Methods and Bulletin of International Association of Medical Museums*, XVII; "Review of the Present Status of the Tiology of Cancer" and "The Good Doctor," *Clinical Bulletin of University Hospitals* (January and March 1938); with Drs. P. György and M. Sullivan, "Nutritional Dermatoses in Rats," *Proceedings of the Society for Experimental Biology and Medicine*, XXXVII.

On April 6, 1938, Professor Harry Goldblatt received the John Phillips Memorial Award of the American College of Physicians in recognition of distinguished contributions to medicine. Dr. Goldblatt's "Studies on Experimental Hypertension" were continued this year: No. III, "The Production of Persistent Hypertension in Monkeys (Macaque) by Renal Ischemia," No. VI, with Dr. W. B. Wartman, "The Effect of Section of Anterior Spinal Nerve Roots on Experimental Hypertension Due to Renal Ischemia," and No. VII, "The Production of the Malignant Phase of Hypertension," were published in the *Journal of Experimental Medicine*, LXV, LXVI, LXVII; No. IV, with Dr. J. E. L. Keyes, "Clinical and Pathologic Studies of the Eyes: A Preliminary Report," appeared in *Archives of Ophthalmology*, XVII, and No. V, "The Pathogenesis of Experimental Hypertension Due to Renal Ischemia," in *Annals of Internal Medicine*, XI. During 1938 Professor Goldblatt delivered the Mary Scott Newbold Lecture before the College of Physicians at Philadelphia and the Harvey Lecture before the Harvey Society of New York.

The publications of Associate Professor E. E. Ecker during the year are: "Ascorbic Acid and Complement Function" (with L. Pillemeyer, D. Wertheimer, and H. Gradis), "Complementing Activity and Ascorbic Acid Content of Guinea Pig Serums Following Ether Anesthesia" (with L. Pillemeyer and D. Wertheimer), and "The Effect of Ascorbic Acid on the Constitution of Complement" (with L. Pillemeyer and D. Wertheimer), in the *Journal of Immunology*, XXIV; "Complement Activity as Influenced by Certain Chemical Agents" and "Complement Function as Influenced by Szent-Gyorgyi's Hexoxidase" (with L. Pillemeyer, E. W. Martienssen and D. Wertheimer) in the *Journal of Biological Chemistry*, CXXIII; "Inactivation of Complement by Todoxanthic Acid" (with L. Pillemeyer) and "Serum Lipoids and Complementary Activity" (with L. Pillemeyer and F. J. Graybill) in *Proceedings of the Society of Experimental Biology and Medicine*,

XXXVIII; "Simultaneous Cutaneous and Lymphnodal Schwartzman Phenomenon" (with Professor H. T. Karsner and L. J. Meschan) in the *Journal of Infectious Diseases*, LXII; "Pressure Cooker Sterilizer for Urologic Instruments" (with L. Pillemer) in *Modern Hospital*, L.

Pediatrics

Professor Henry S. Gerstenberger addressed the Fourth International Pediatric Congress, at Rome, in September 1937, and the American Association for the Advancement of Science, at Indianapolis, the following December, on "Light Deficiency Rickets in Monkeys (*Macaca Rhesus*).". He also reported on "The Influence of the Ca:P Ratio of the Diet on the Ca:p Ratio of the Blood Serum During the Development and the Cure of Low Phosphorus Rickets" (with Donald A. N. Smith, Edna Chapman, Catharine Rose and F. Beal), before sections of the Society for Experimental Biology and Medicine, in Cleveland in January 1938. He also addressed the American Institute of Nutrition, at Baltimore, in March, on "The Effect of the Ca:P Ratio of the Diet on the Ca:P Ratio in the Blood Serum of Rachitic Monkeys Before and During Treatment with Ultraviolet Light," and the American Society of Biological Chemists, at Baltimore, in April, on "Effect of Parenteral Administration of Salt Solutions on Calcification *in vivo* of Bones of Monkeys Made Rachitic by Light Deficiency."

Dr. Paul György, Associate Professor of Pediatrics, contributed the following studies: "Nutritional Dermatoses in Rats," "Nicotinic Acid and Prevention of Nutritional Panmyelophthisis in Rats," and "Pediculosis in Rats Kept on a Riboflavin Deficient Diet" in the *Proceedings of the Society for Experimental Biology and Medicine*, XXXVII, XXXVIII; "Panmyelophthisis with Hemorrhagic Manifestations in Rats on a Nutritional Basis" (with Drs. H. Goldblatt, F. R. Miller, and R. P. Fulton) in the *Journal of Experimental Medicine*, LXVI; and "Crystalline Vitamin B₆" in the *Journal of the American Chemical Society*, LX. Dr.

György addressed the American Institute of Nutrition, at Baltimore, March 30, 1938.

Pharmacy

The McGraw-Hill Book Co. has issued a revised edition (1938) of *Pharmaceutical Mathematics* by Dean Edward Spease. Articles by Dean Spease during the year were: "The Relationship of Pharmacy to Health" in *American Journal of Pharmaceutical Education*, I; "The Present Status of Hospital Pharmacy," *Journal of the American Pharmaceutical Association*, XXVII; and "After the Elixir—What?" in the *Clinical Bulletin of the University Hospitals*, II.

Dr. Leroy Delos Edwards, Assistant Professor of Pharmacognosy, addressed the medical sciences section of the American Association for the Advancement of Science, meeting in Indianapolis last December, on "The Hemolytic Action of Sodium and Potassium Soaps." His article, "A Graduate Course in Hospital Pharmacy," appeared in the *Journal of the American Pharmaceutical Association*, XXVI.

Pharmacology

Dean Torald Sollmann, in collaboration with Drs. H. N. Cole, G. W. Binkley, W. H. Connor, Maurice Sullivan, and Miss Katherine Henderson, has published three more parts to their study of "Clinical Excretion of Bismuth, II, The Urinary Excretion of Bismuth After Clinical Intramuscular Injections of Sodium Iodobismuthite (Sodium Bismuth Iodide, Iodobismitol) and Sodium Bismuth Thioglycollate (Thiobismol); III, Fecal and Total Excretion"; and "IV, The Late Excretion of Bismuth After Cessation of Treatment" in the *American Journal of Syphilis, Gonorrhea, and Venereal Diseases*, XXI. In collaboration with Dr. A. J. Gilbert, Dean Sollmann reported on "Microscopic Observations of Bronchiolar Reactions" and "Reactions of Carotid Arteries of Small Animals" in the *Journal of Pharmacology and Experimental Therapeutics*, LXI, LXII.

Philosophy

"The Significance of the Egocentric Situation," by Professor Jared Sparks

Moore, appeared in the *Journal of Philosophy* in March 1938. Last winter Professor Moore addressed the eastern division of The American Philosophical Association, at Princeton, on "The Problem of Material in a Work of Art."

Physiology

Volume VI of *Collected Papers from the Department of Physiology*, Western Reserve University, concludes with the assembly of the 170th published contribution at the close of nineteen years. Original investigations are distributed in various fields as follows: apparatus, 9; blood and blood-forming organs, 19; central nervous system, 3; gastro-intestinal tract, 11; general physiology, 7; heart and circulation, 97; metabolism, 11; uterus, 3. Seventy-one persons contributed to the publications, of whom 47 were extra-departmental or volunteer associates.

During a trip to the Orient, Professor Carl J. Wiggers gave sixteen medical lectures on "Physiology and the Heart and Circulation" before scholarly and scientific groups in Canton, Hong-Kong, Shanghai, Peiping, Seoul, Kyoto, and Tokyo. He will be "Relator Extraordinary" at the sixth National Congress of Medicine, which meets in Argentina in October and during his visit he will lecture before the National Academy of Medicine at Buenos Aires and the Medical Schools of Cordoba and Rosario.

Articles by Associate Professor J. P. Quigley during the year were nine in number in related series of studies: "Action of Fats Introduced into the Duodenum on the Pyloric Sphincter and Adjacent Portions of the Gut" (with I. Meschan), "The Difference in Potential Across Gastric Membranes and Certain Factors Modifying the Potential" (with J. Bancroft, G. S. Adair, and E. N. Goodman), "Spontaneous Motility of the Pyloric Sphincter and Adjacent Regions of the Gut in the Unanesthetized Dog" (with I. Meschan), and "The Role of the Vagus in the Regulation of the Pyloric Sphincter and Adjacent Portions of the Gut, with Especial Reference to the Process of Gastric Evacuation" (with I. Meschan) in the

American Journal of Physiology, CXVI, CXIX, CXXI; "The Relative Effectiveness of Atropine and Novatropin on Gastric and Colonic Motility of the Unanesthetized Dog" and "The Inhibition of Human Gastric Hypermotility by Atropine or Novatropin" in the *Journal of Pharmacology and Experimental Therapeutics*, LXI; "Mental Disturbances from Atropine or Novatropin Given to Subjects Under the Influence of Insulin" in the *Journal of the American Medical Association*, CIX, and "Diminished Effectiveness of a Sound Administration of Atropine or Novatropin" in *Proceedings of the Society for Experimental Biology and Medicine*, XXXVII.

Physics

Dr. Cassius W. Curtis, contributed "The First Spark Spectrum of Manganese" to the *Physical Review* for March 1938, and read a paper before a section of the American Physical Society.

"Collisions of Alpha Particles with Neon and Deuterium Nuclei," by Dr. J. T. McCarthy, was published in the *Physical Review*, LVIII.

Political Science

Assistant Professor Wilbur W. White, who spent the summer in The Hague, Nuremberg, and Prague, and who last year renewed his contacts in Turkey and other countries of the Near East, has recently been assigned to do monthly articles on the Near East for *Events*. His book, *The Process of Change in the Ottoman Empire* (Chicago: University of Chicago Press, 1937) has been well received.

During 1938 three articles appeared by Assistant Professor Richard C. Spencer: "The Unicameral Legislature of Ontario," in the *American Political Science Review*, XXXII; "Death of a Gerrymander" in the *National Municipal Review*, XVII; and "The Use of Illustrative Materials in Political Science Classes" in the *Journal of Higher Education*, IX. Professor Spencer also edited *Bicameralism in Ohio* by Thelma Griswold, now in mimeograph form.

A revised edition of *The Great Powers*

in *World Politics*, by Associate Professor Brooks Emeny and Frank H. Simonds (deceased), has been issued by The American Book Co. Between November 17, 1937, and May 27, 1938, Professor Emeny addressed learned societies at Beverly Hills, Honolulu, St. Paul, Oxford, London, and Prague on various phases of international relations.

Assistant Professor Thomas B. Wenner's article, "Dutch Cure for Fascism," was published in *Current History* for May.

Psychology

Director A. Caswell Ellis was discussion leader on "The Place of Institutions of Higher Learning in Adult Education" at the Great Lakes Adult Education Conference held in Toledo last December. *School and Society*, XLVI, carried his survey of "Problems in Adult Education Needing Study." The third revision (1938) of *Fundamentals of Farming and Farm Life* by Dr. Ellis and E. J. Kyle has been issued by Charles Scribner's Sons.

The Scientific Monthly, XLIV, published a long article by Professor Benjamin R. Simpson, "A Pragmatist Examines the Discard of Mechanistic Psychology."

Associate Professor Roland C. Travis, with Mr. Brent Baxter, reported on "The Reaction Time to Vestibular Stimuli" in the *Journal of Experimental Psychology*, XX, and presented two papers—"Effects of Reward and Punishment on Motor Learning" before the American Psychological Association and "Position of the Head and Vestibular Stimulation" before the Mid-Western Psychological Association.

Continuing his series on "Emotional Behavior in the Rat," Associate Professor Calvin S. Hall contributed a fourth paper, "The Relationship Between Emotionality and Stereotyping of Behavior," to the *Journal of Comparative Psychology*, XXIV; in the same journal, XXII, appeared his "Further Investigation of the Role of Emphasis in Learning" (with E. H. Porter, Jr.), and in the *Sigma Xi Quarterly*, XXVI, "The Inheritance of Emotionality," which he had read at the In-

dianapolis meeting of the American Association for the Advancement of Science.

Two articles by Assistant Professor Herbert Gurnee were recently published in the *Journal of Experimental Psychology*, XXI, XXII: "A Comparison of Collective and Individual Judgments of Fact" and "The Effect of Electric Shock for Right Responses on Maze Learning in Human Subjects." The *Journal of Social and Abnormal Psychology*, XXXIII, printed his "Social Distances of Some Common Social Relationships," and the *American Journal of Psychology*, XLI, his paper on a portable maze. The paper on the effect of electric shock was read at the annual meeting of the American Psychological Association at Minneapolis; "Effect of the Collective Situation on Individual Learning" and "Some Difficulties in the Application of Data on Punishment" before sections of the Mid-Western Psychological Association.

Associate Professor L. Dewey Anderson's "Childhood Behavior in Relation to Clinical Problems" appeared in *Angle Orthodontist*, VII.

Four articles by Assistant Professor Marguerite Hertz were published during the year: "Some Recent Rorschach Problems" in *Rorschach Research Exchange*, II, "The Scoring of the Rorschach Test with Specific Reference to the 'Normal Detail' Category" in the *American Journal of Orthopsychiatry*, VIII, "The 'Popular' Response Factor in the Rorschach Scoring" in the *Journal of Genetic Psychology*, LII. Dr. Hertz spoke before the New York Rorschach Section in February.

Religion

The *Journal of the American Oriental Society*, LVII, contained two articles by Associate Professor Horace A. Rigg, Jr.: "The Route of Sargon's 'Eighth Campaign'" and "A Note on the Names Urartu and Armanum." In April he presented "The So-Called Caucasian Linguistic Relationships" at the annual meeting of the American Oriental Society. A previous study, "The Present Status of the Hyksos Problem" was read before the Society of Biblical Literature and Exegesis.

Romance Languages

Professor Emile B. de Sauzé's addresses before teachers' associations have taken him to New York, Indiana, and Pennsylvania this year.

Sociology

"Negro Names," by Professor Newbell Niles Puckett, was published in the *Journal of Negro History*, XXIII. Last winter he addressed the Association for the Study of Negro Life and History.

Surgery

Professor Carl H. Lenhart addressed the Ohio State Medical Association, May 12, on "Indications for the Surgical Treatment of Cholecystitis and Cholelithiasis."

Associate Professor Claude S. Beck's published studies of the year were: "The Control of the Heart Beat by the Surgeon with Special Reference to Ventricular Fibrillation Occurring During Operation," *Annals of Surgery*, CVI; "Acute and Chronic Compression of the Heart," *American Heart Journal*, XIV; "The Treatment of Coronary Sclerosis and Angina Pectoris by Producing a New Blood Supply to the Heart" (with Dr. Harold Feil), *Journal of the American Medical Association* for November 27, 1937; and "The Augmentation of Collateral Coronary Circulation by Operation" (with Dr. Frederick Mautz), *Journal of Thoracic Surgery*, VII.

The publications of Professor Emeritus George W. Crile for the year were: "Radical Operation for Malignant Tumors of Thyroid Gland," "Surgery, Gynecology and Obstetrics," LXIV; "Genesis and Surgical Treatment of Essential Hyperten-

sion," *Pennsylvania Medical Journal*, XL; "Treatment of Intractable Peptic Ulcer: Technic of Celiac Ganglionectomy" and "Perforated Peptic Ulcer: Diagnosis, Pre-operative, Operative, and Postoperative Treatment," *Surgical Clinic of North America*, XVII; "Hyperthyroidism in Children Under Five Years of Age; Report of Four Cases," *American Journal of Surgery*, XXXVII; "Hospital Standardization in Retrospect," *Nova Scotia Medical Bulletin*, XVI; "A Case Illustrating the Analogy Between Essential Hypertension and Raynaud's and Buerger's Disease," *Cleveland Clinic Quarterly*, IV; "A Theoretical Conception of the Mechanism by Which a Normal Cell is Changed to a Cancer Cell," *Acta of the International Union Against Cancer*, II; "Diagnosis and Management of Diseases of the Thyroid Gland," *Proceedings of Inter-State Post-graduate Medical Assembly of North America* (1937); "Clinical Review of Results in 241 Operations for Essential Hypertension," *Medicine Today*, I; "Indications for and End Results of Surgery in the Treatment of Duodenal Ulcer," *American Journal of Surgery*, XL; and "Present Status of Anoscopy," *Trained Nurse and Hospital Review*, (April 1938).—L. N. R.

A Notable Aid For Research And Scholarship in Cleveland

The Cleveland Regional Catalogue, begun in 1936, is nearing completion. It is housed in Thwing Hall and is now ready for use. Under the general direction of

Dean Hirshberg, Director of the University Libraries, and financed by W. P. A. funds considerably over 2,000,000 cards have been photographed from thirty-three library catalogues, including those of Oberlin College, Ohio State University, the Universities of Cincinnati and Michigan, Western Reserve University, Western Reserve Historical Society, and the Cleveland Public Library, and will shortly all be typed on the regulation 3" x 5" catalogue cards and filed in a Union Catalogue in Thwing Hall. It occupies over twenty catalogue cabinets. It is a compilation of author cards only. Each card will give the author of the book, title of the book, edition, publisher, place and date of publication, paging or volume and series notes, as well as a list of participating libraries in which the book may be found. The inclusion of United States document author entries is an important additional feature.

The purpose of such a Union Catalogue is to facilitate co-operation in the purchase of new books and make easier scholarly reading and research. It means, especially, that anyone in Cleveland, the University body of scholars or the interested public, may, with a minimum of effort, by consulting the catalogue, find where in the so-called Cleveland Region any desired book may be found, and in many cases by inter-library loans make use of it without leaving Cleveland if it is not in one of the Cleveland libraries. It would be hard to over-emphasize the value of this Regional Catalogue to the participating libraries and to scholars generally and its significance as an asset to Cleveland.